Claims

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1. A method of manufacturing a thin film disk comprising the steps of:
recording a first timestamp for the end of thin film deposition for the disk;
waiting a predetermined time after the first timestamp to allow the thin film
surface to stabilize;

applying a lubricant to the disk after the predetermined time has elapsed; recording a second timestamp for applying the lubricant to the disk; checking the second timestamp and rejecting the disk if a selected time period has been exceeded since the lubricant was applied, then performing an abrasive polishing of the disk; and

performing a glide test on the disk.

- 2. The method of claim 1 wherein the waiting step further comprises placing the disk at a designated location and using a timing aid to alert an operator when the disk is ready for lubrication.
 - 3. The method of claim 1 wherein the lubricant has a perfluoropolyether backbone.

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- 4. The method of claim 1 wherein the lubricant has an X-CF₂-O-(CF₂-CF₂-O) _p-(CF₂O) _q-CF₂-X structure with X being -CH₂OCH₂CH(OH)CH₂OH.
- 5. The method of claim 1 wherein the lubricant is Fomblin Z-TETRAOL.

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- 6. The method of claim 1 wherein the disk has a thin film overcoat of diamond-like carbon.
- 7. The method of claim 1 wherein the disk has a thin film overcoat of CHx.

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8. The method of claim 1 wherein the disk has a thin film overcoat of CNx.

9. A method of manufacturing thin film disks comprising the steps of:

depositing at least one thin film on a disk;

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reading an identifier from a carrier containing the disk;

recording a first timestamp indicative of a time when thin film deposition was completed, the first timestamp being recorded with the identifier in an automated database:

holding the carrier for a predetermined time to allow a surface of the thin film to stabilize;

after the predetermined time has elapsed, applying a lubricant to the disk; recording a second timestamp with the identifier in an automated database, the second timestamp being indicative of a time when the lubricant was applied; and

reading the identifier and rejecting the disk if more than a selected time period has elapsed after the lubricant was applied or else performing an abrasive polishing of the disk.

- 10. The method of claim 9 wherein the holding step further comprises placing the disk at a designated location and using a timing aid to alert an operator when the disk is ready for lubrication.
- 11. The method of claim 9 wherein the lubricant has a perfluoropolyether backbone.
- 25 12. The method of claim 9 wherein the lubricant has an X-CF₂-O-(CF₂-CF₂-O)_p-(CF₂O)₀-CF₂-X structure with X being -CH₂OCH₂CH(OH)CH₂OH.
 - The method of claim 9 wherein the lubricant is Fomblin Z-TETRAOL.
- 30 14. The method of claim 9 wherein the disk has a thin film overcoat of diamond-like carbon.

- 15. The method of claim 9 wherein the disk has a thin film overcoat of CHx.
- 16. The method of claim 9 wherein the disk has a thin film overcoat of CNx.

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